

# Making Math Count -- Advanced Mathematics

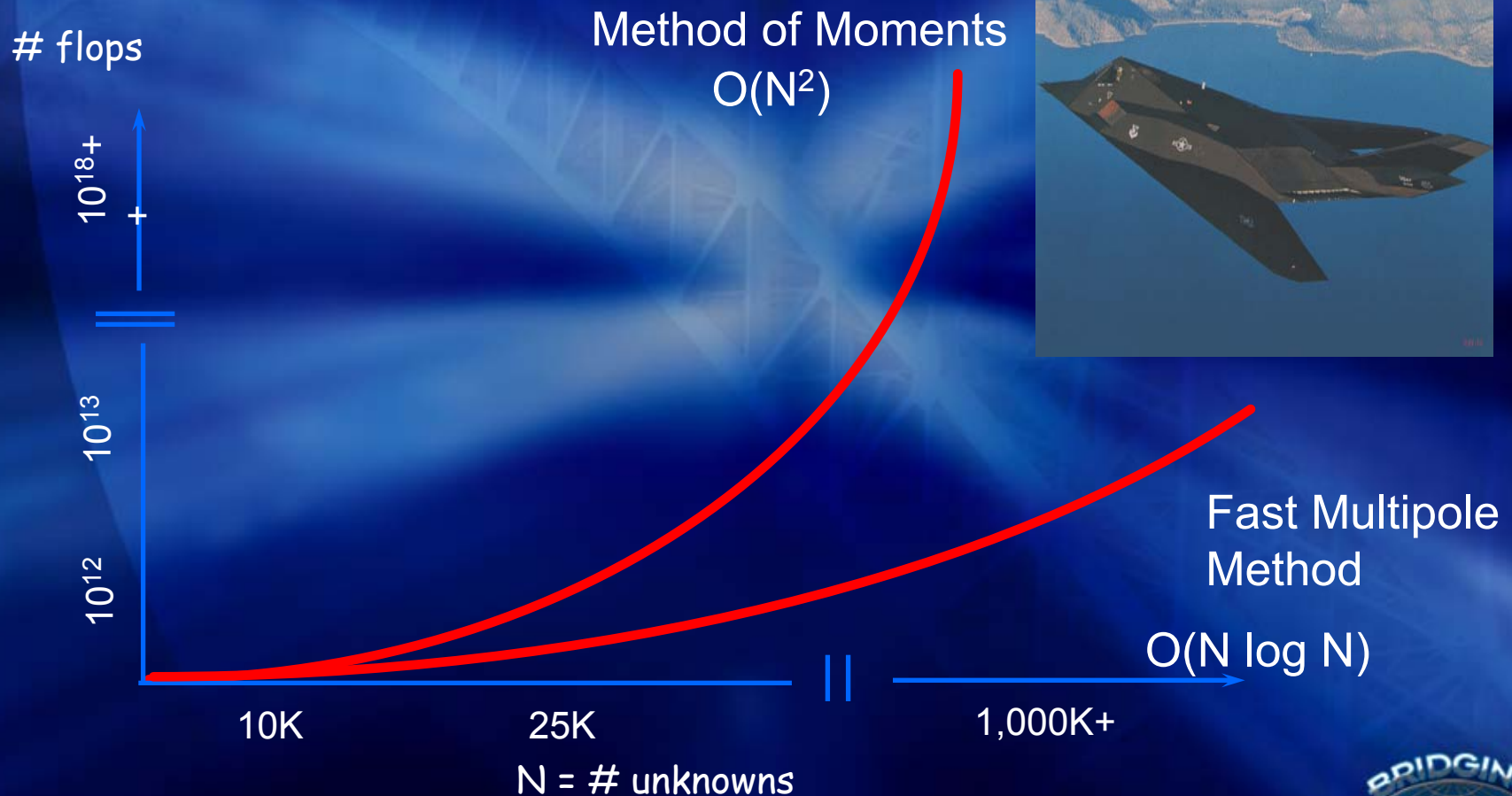
Dr. Carey Schwartz



# Complex Radar Cross Section



# Good Computation Matters



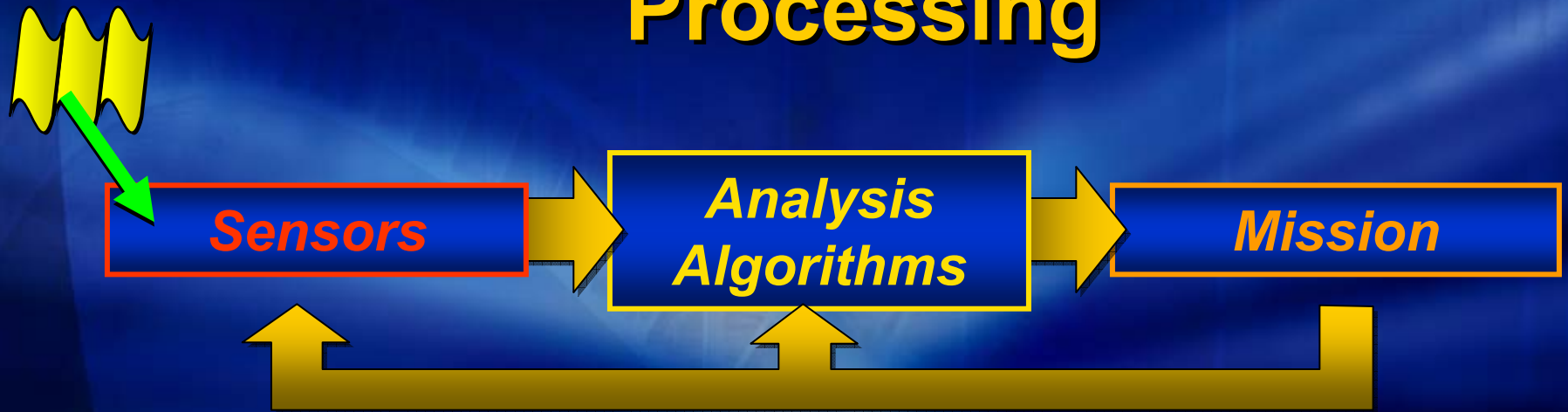


# Applied and Computational Mathematics Themes

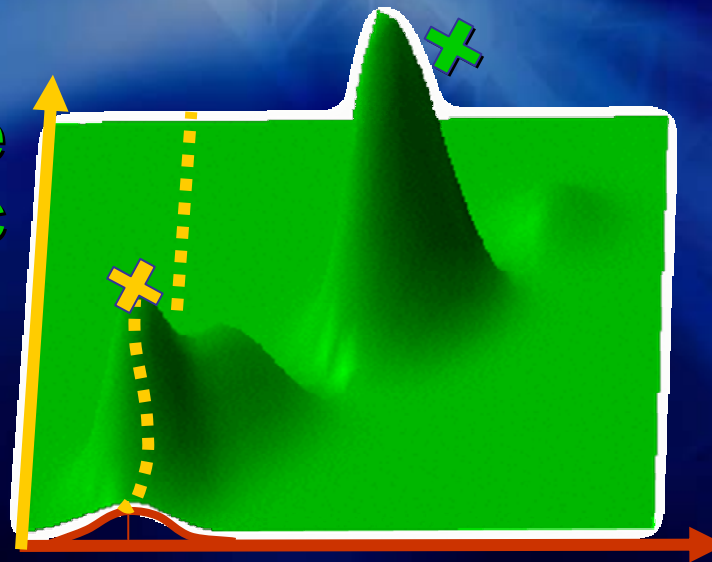
- Mission Specific Sensor Systems
- Predict Properties and Performance
- Dimensionality Reduction



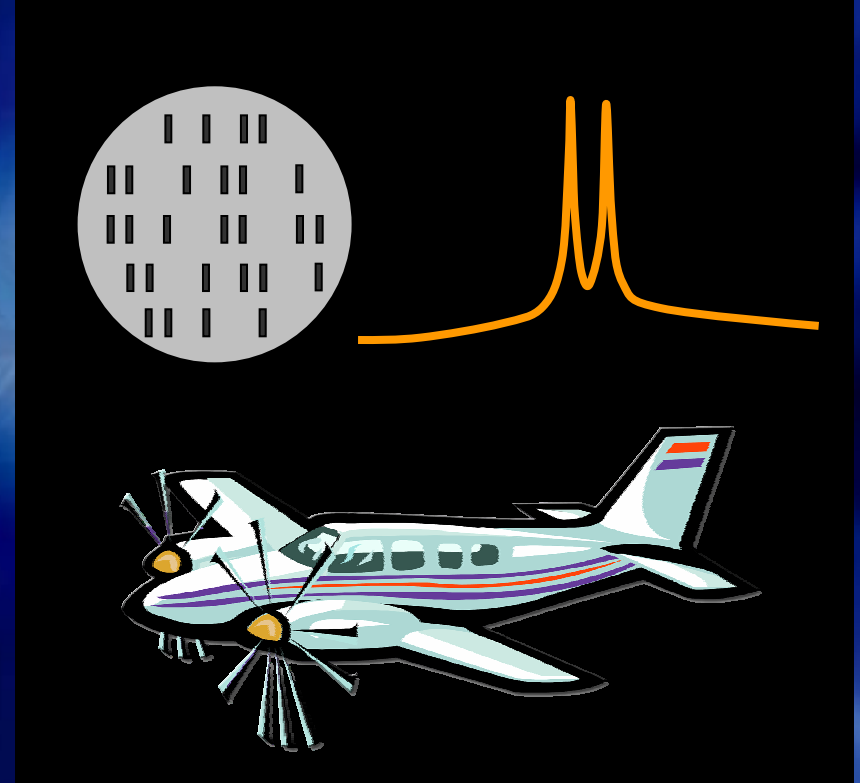
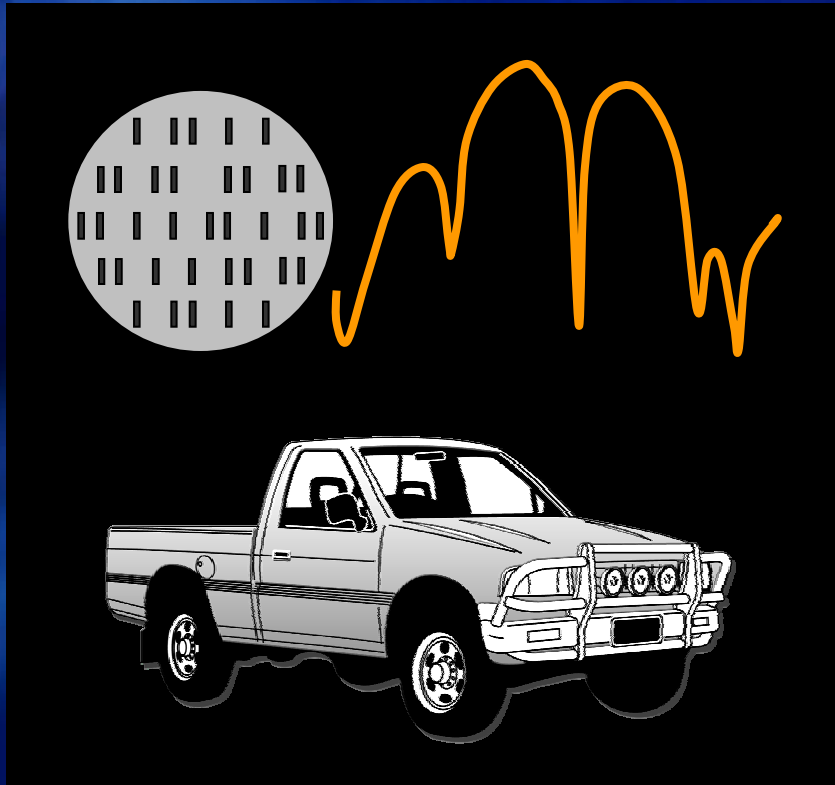
# Integrated Sensing and Processing



Performance  
Metric



# Designer Waveform

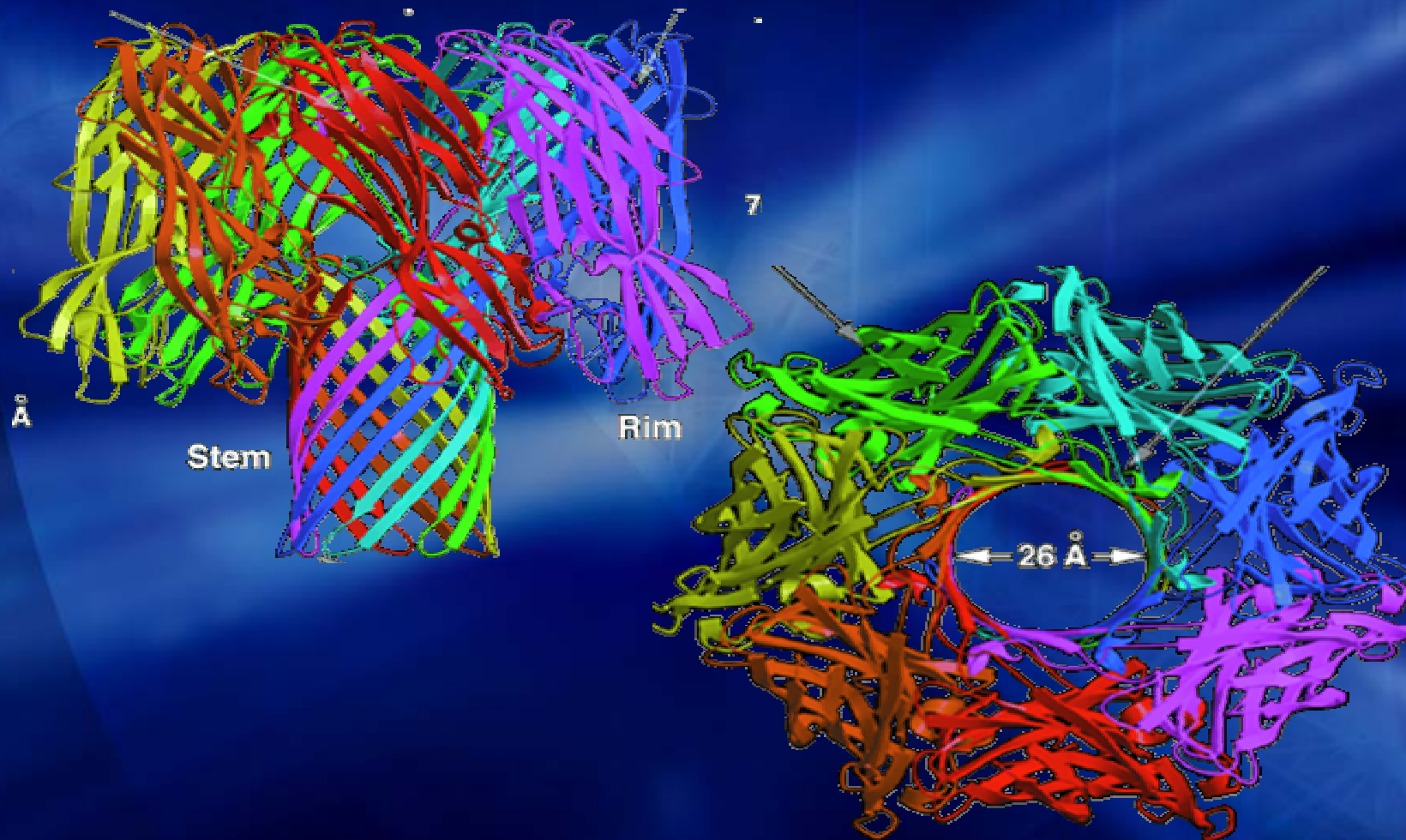


# Advanced Computational Electromagnetics (ACE)





# Protein Design Space





# Opportunities

- Waveform Adaptive Signal Processing
- Computation of Elliptic PDEs
- Uncertainty Management
- Dimensionality Reduction

